

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claims 1 - 24. (cancelled).

Claim 25. (currently amended): An image processing method for processing an input document image, said method comprising the steps of:

displaying an instruction input window to receive both of a first instruction and a second instruction from a user, wherein the instruction input window presents a plurality of checkbox groups each including a plurality of checkboxes, selection of only one checkbox being allowed for each checkbox group, and wherein the first instruction indicates, by selecting one of a plurality of ~~buttons which include a button~~ checkboxes in a first checkbox group which includes a checkbox for auto discrimination of the document orientation and four ~~buttons~~ checkboxes each for manual instruction of the document orientation corresponding to one of 0, 90, 180 and 270 degrees on the instruction input window, whether the orientation of the document image should be corrected automatically or manually, and wherein the second instruction indicates, by selecting one of a plurality of checkboxes in a second checkbox group which includes a checkbox for auto tilt correction and a checkbox for no tilt correction, whether or not a tilt of the document image should be automatically corrected;

determining, based on the first instruction corresponding to one of the ~~buttons~~

checkboxes selected in the first checkbox group on instruction input window, whether the user has instructed that the orientation of the document image should be corrected automatically or manually;

automatically discriminating the orientation of the document image as one of 0, 90, 180 and 270 degrees if it is determined in said determining step that the user has instructed, by selecting the ~~button~~ checkbox for auto discrimination, that the orientation of the document image should be automatically corrected;

automatically rotating the document image based on the discriminated orientation of the document image if it is determined in said determining step that the user has instructed the orientation of the document image should be automatically corrected;

rotating the document image according to a rotation angle of one of 0, 90, 180 and 270 degrees corresponding to the ~~button~~ checkbox for manual instruction selected by the user if it is determined in said determining step that the user has instructed, by selecting one of the four ~~buttons~~ checkboxes for manual instruction, that the orientation of the document image should be manually corrected; and

if it is determined based on the second instruction that the tilt of the document image should be automatically corrected, automatically correcting the tilt of the document image which is rotated in said automatic rotating step or in said rotating step, wherein said automatic correction step does not execute automatic correction of the tilt of the document image which is rotated in said automatic rotating step or in said rotating step if it is determined based on the second instruction that the tilt of the document image should not be automatically corrected.

Claim 26. (previously presented): An image processing method according to claim 25, wherein said automatic discrimination step includes outputting data indicating that the orientation of the document image cannot be discriminated, when the orientation of the document image cannot be discriminated.

Claim 27. (previously presented): An image processing method according to claim 25, wherein said automatic discrimination step includes discriminating the orientation of the document image by character-recognizing character images included in the document image.

Claim 28. (canceled).

Claim 29. (previously presented): An image processing method according to claim 26, further comprising a step of storing the outputted data as information relating to the document image when the orientation of the document image cannot be discriminated.

Claim 30. (previously presented): An image processing method according to claim 25, further comprising a step of automatically setting the second instruction so that the tilt of the document image should be automatically corrected, if the first instruction is set by the user so that the orientation of the document image should be automatically corrected.

Claim 31. (previously presented): An image processing method according to claim 25, wherein the tilt angle of the document image is correctable if the tilt angle is within

±45 degrees.

Claim 32. (currently amended): An image processing device for processing an input document image, comprising:

means for displaying an instruction input window to receive both of a first instruction and a second instruction from a user, wherein the instruction input window presents a plurality of checkbox groups each including a plurality of checkboxes, selection of only one checkbox being allowed for each checkbox group, and wherein the first instruction indicates, by selecting one of a plurality of ~~buttons which include a button~~ checkboxes in a first checkbox group which includes a checkbox for auto discrimination of the document orientation and four ~~buttons~~ checkboxes each for manual instruction of the document orientation corresponding to one of 0, 90, 180 and 270 degrees ~~on the instruction input window~~, whether the orientation of the document image should be corrected automatically or manually, and wherein the second instruction indicates, by selecting one of a plurality of checkboxes in a second checkbox group which includes a checkbox for auto tilt correction and a checkbox for no tilt correction, whether or not a tilt of the document image should be automatically corrected;

means for determining, based on the first instruction corresponding to one of the ~~buttons~~ checkboxes selected in the first checkbox group on the instruction input window, whether the user has instructed that the orientation of the document image should be corrected automatically or manually;

means for automatically discriminating the orientation of the document image as one of 0, 90, 180 and 270 degrees if said determining means determines that the user has

instructed, by selecting the ~~button~~ checkbox for auto discrimination, that the orientation of the document image should be automatically corrected;

means for automatically rotating the document image based on the discriminated orientation of the document image if said determining means determines that the user has instructed that the orientation of the document image should be automatically corrected;

means for rotating the document image according to a rotation angle of one of 0, 90, 180 and 270 degrees corresponding to the ~~button~~ checkbox for manual instruction selected by the user if said determining means determines that the user has instructed, by selecting one of the four ~~buttons~~ checkboxes for manual instruction, that the orientation of the document image should be manually corrected; and

means for, if it is determined based on the second instruction that the tilt of the document image should be automatically corrected, automatically correcting the tilt of the document image which is rotated by said automatic rotating means or by said rotating means, wherein said automatic correction means does not execute the automatic correction of the tilt of the document image which is rotated in said automatic rotating means or in said rotating means if it is determined based on the second instruction that the tilt of the document image should not be automatically corrected.

Claim 33. (previously presented): An image processing device according to claim 32, wherein said means for automatically discriminating the orientation of the document image outputs data indicating that the orientation of the document image cannot be discriminated when the orientation of the document image cannot be discriminated.

Claim 34. (previously presented): An image processing device according to claim 32, wherein said means for automatically discriminating the orientation of the document image discriminates the orientation of the document image by character-recognizing character images included in the document image.

Claim 35. (canceled).

Claim 36. (previously presented): An image processing device according to claim 33, further comprising means for storing the outputted data as information relating to the document image when the orientation of the document image cannot be discriminated.

Claim 37. (previously presented): An image processing device according to claim 32, further comprising means for automatically setting the second instruction so that the tilt of the document image should be automatically corrected, if the first instruction is set by the user so that the orientation of the document image should be automatically corrected.

Claim 38. (previously presented): An image processing device according to claim 32, wherein the tilt angle of the document image is correctable if the tilt angle is within ± 45 degrees.

Claim 39. (currently amended): A computer-readable storage medium containing a program for executing processing of an input document image, the program comprising code

for:

displaying an instruction input window to receive both of a first instruction and a second instruction from a user, wherein the instruction input window presents a plurality of checkbox groups each including a plurality of checkboxes, selection of only one checkbox being allowed for each checkbox group, and wherein the first instruction indicates, by selecting one of a plurality of ~~buttons which include a button~~ checkboxes in a first checkbox group which includes a checkbox for auto discrimination of the document orientation and four ~~buttons~~ checkboxes each for manual instruction of the document orientation corresponding to one of 0, 90, 180 and 270 degrees ~~on the instruction input window~~, whether the orientation of the document image should be corrected automatically or manually, and wherein the second instruction indicates, by selecting one of a plurality of checkboxes in a second checkbox group which includes a checkbox for auto tilt correction and a checkbox for no tilt correction, whether or not a tilt of the document image should be automatically corrected;

determining, based on the first instruction corresponding to one of the ~~buttons~~ checkboxes selected in the first checkbox group on the instruction input window, whether the user has instructed that the orientation of the document image should be corrected automatically or manually;

automatically discriminating the orientation of the document image as one of 0, 90, 180 and 270 degrees if it is determined in said determining step that the user has instructed, by selecting the ~~button~~ checkbox for auto discrimination, that the orientation of the document image should be automatically corrected;

automatically rotating the document image based on the discriminated orientation

of the document image if it is determined in said determining step that the user has instructed that the orientation of the document image should be automatically corrected;

rotating the document image according to a rotation angle of one of 0, 90, 180 and 270 degrees corresponding to the ~~button~~ checkbox for manual instruction selected by the user if it is determined in said determining step that the user has instructed, by selecting one of the four ~~buttons~~ checkboxes for manual instruction, that the orientation of the document image should be manually corrected; and

if it is determined based on the second instruction that the tilt of the document image should be automatically corrected, automatically correcting the tilt of the document image which is rotated in said automatic rotating step or in said rotating step, wherein said automatic correction step does not execute the automatic correction of the tilt of the document image which is rotated in said automatic rotating step or in said rotating step if it is determined based on the second instruction that the tilt of the document image should not be automatically corrected.

Claim 40. (previously presented): A computer-readable storage medium according to claim 39, wherein said code for automatic discrimination causes outputting of data indicating that the orientation of the document image cannot be discriminated when the orientation of the document image cannot be discriminated.

Claim 41. (previously presented): A computer-readable storage medium according to claim 39, wherein said code for automatic discrimination causes discrimination of the orientation of the document image by character-recognizing character images included in the

document image.

Claim 42. (canceled).

Claim 43. (previously presented): A computer-readable storage medium according to claim 40, further comprising code for storing the outputted data as information relating to the document image when the orientation of the document image cannot be discriminated.

Claim 44. (previously presented): A computer-readable storage medium according to claim 39, further comprising code for automatically setting the second instruction so that the tilt of the document image should be automatically corrected, if the first instruction is set by the user so that the orientation of the document image should be automatically corrected.

Claim 45. (previously presented): A computer-readable storage medium according to claim 39, wherein the tilt angle of the document image is correctable if the tilt angle is within ± 45 degrees.